

DESIGNING THE BALANCED SCORECARD FOR THE FACULTY OF ECONOMICS OF SATYA WACANA CHRISTIAN UNIVERSITY

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A b s t r a c t

Concerning the competition of universities in Indonesia, a research about the measurement and quality control from strategic perspectives will pose an interesting subject to be explored. The high-pressure of the economic condition, the unstable political environment, the globalization era as well as the unfair competition has changed the business environment. As a result, performance measures are used to guide the managers' decision and to evaluate the performance of managers and their units. This measurement is used as guidelines and incentives to facilitate the coordination among managers and business unit goals with those of the overall corporate goals. Without the performance measurement system, companies will probably move to a wrong decision.

One of the tools that can provide comprehensive, coherent and balance performance measures is Balance Scorecard. Balance Scorecard does not only provide comprehensive measures (financial, Customer, Internal Business Process, and Learning & Growth), but is also provide a roadmap about how to achieve financial objectives without sacrificing long term performance.

The Faculty of Economics of Satya Wacana Christian University (FE SWCU), as one of the private universities in Indonesia, must also formulate and implement strategies that will fit with the high turbulent business environment. To avoid a pitfall of financial performance, FE SWCU have to implement Balance Scorecard.

The Balance Scorecard designed for FE SWCU consists of strategic objectives derived from company vision mission, outcome measures and performance driver measures, and targets as milestones to know achievement of strategic objectives of the company.

Keywords: Performance Measurement System, Financial Perspective, Customer Perspective, Internal Business Process Perspective, Learning and Growth Perspective.

I n t r o d u c t i o n

Implementation of free trade areas and globalisation issues has forced business communities to work hard and be professional. Every sector of business in Indonesia will face these hard situations, including academic sectors. For private universities especially, the competition is not only from the local/domestic competitors but also from foreign competitors.

Concerning the competition of universities in Indonesia, a research about the measurement and quality control from strategic perspectives will pose an interesting subject to be explored. One of the leading private university in Indonesia, i.e. Satya Wacana Christian University (SWCU) also faced these hard competitions. Concerning these hard competitions, it will be interested to conduct the research about the performance measurements which has done by this private

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university, specifically in the Faculty of Economics of Satya Wacana Christian University (FE SWCU).

Regarding that phenomena, this study will analyze: The current performance measurements of FE SWCU and the indicators to design the Balanced Scorecard for the FE SWCU.

Theoretical Framework

The Balanced Scorecard (BSC) was developed as a result of a research project in 1990 carried out by Professor Robert Kaplan of Harvard University and David Norton, a management consultant, in conjunction with 12 American businesses that were regarded as being at the leading edge of performance measurement.

The coalition between the irresistible force to build long-range competitive capabilities and the immovable object of the historical-cost financial accounting model has created a new synthesis: The Balanced Scorecard. The BSC retains traditional financial measures (Kaplan & Norton, 2000).

The BSC expands the set of business unit objectives beyond summary financial measures. Corporate executives can now measure how far their business units create value for current and future customers and how they must enhance internal capabilities and the investment in people, systems, and procedures necessary to improve future performance.

Mulyadi (2000) states that the BSC complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from an organization's vision and strategy. The objectives and measures view organizational performance from four perspectives: financial, customer, internal business process, and learning and growth. Meanwhile, Mulyadi concludes that the BSC as performance measurement system does not provide only financial, but also non-financial performance measurement system as complements or balancing. Objectives of the BSC are derived from vision and strategies of organizations.

Four Perspectives of The Balanced Scorecard

Scorecards are "balanced" in two main ways. Firstly, there is a balance between internal and external measures. Secondly, the various perspectives, including financial and non-financial measures, balance it. The original BSC focuses on four different perspectives that are connected within a cause and effect relationship. These are referred to as the Financial, Customer, Internal Business, and Learning and Growth perspectives. While these represent the original scorecard perspectives developed by Kaplan and Norton, companies have since then adapted their scorecards in a variety of ways.

Table 1
Four perspectives of BSC

Perspectives	Explanation
Financial	Highlights how the company appears to shareholders and here one finds many of the traditional measures. The key to success factors are ROI / EVA and cash flow.
Customer	Highlights how the customer perceives an organization. Generally, the following five areas are measured within the customer perspectives: Customer satisfaction, customer profitability, customer retention, customer acquisition, and market share.
Internal Business Process	The scorecards identify all processes needed to support the organizations' strategies to achieve established objectives.
Learning & Growth	Identifies the infrastructure that the organization must build to create long-term growth and improvement. Organizational learning & Growth come from three principal sources: People, systems, and organizational procedures.

Sources: Kaplan & Norton, 2000

Analysis

Vision, Mission, and Strategy of FE SWCU

Vision is a roadmap of an organization's future – the direction it is headed, the business position it intends to stake out, and capabilities it plans to develop. If vision emphasizes on organization's future, mission tends to be stressed on present (Thompson & Strickland, 1999).

FE SWCU visions and missions are in line with the SWCU. They are:

Vision

- To become a faculty that creates and develops the knowledge of economics and high-level business based on the local and regional perspectives, especially of the Asia-Pacific region.
- To become a faculty that tailors the expertise with the ability of creation in the aspects of economics and appropriate commercial aspects for the development and changes in the society.
- To become a center of creation and supervision of leadership in terms of economics and business aspects with the expertise based on Christian faith and ethics.
- To become a center of research and study towards the changes in the economic-business environment as well as changes within the economic-business aspects themselves.

- To become a center of consultation and services in the economic and business aspects.

Mission

- To carry out a High Education Philosophy in the fields of economic and business.
- To carry out the Christian faith within the Economics Faculty, i.e. the process in the faculty based on the motivation and is a result of Non denominational Christian faith and acts as a creative innovation to be involved actively in fulfilling the needs of the society and making contribution to the country, especially in the fields of economy and business in the middle of dynamic regional changes.
- To encourage and develop attitudes and concepts that are creative and realistic based on the sincere consciousness guided by the Words of God in the economic and business aspects.
- To search and create deep relationship between Christian faith and the knowledge in economics and business.
- To create leaders in the fields of economics and business who posses sensitivity and strong ethics based on local and regional perspectives, especially Asia-Pacific's.

Strategic Objectives

"Strategic objectives are the target management established for strengthening the organization's overall business position and competitive vitality." (Thompson & Strickland, 1999).

The Balanced Scorecard classifies the strategic objectives into four areas: financial, customer, internal business process and learning & growth.

1. Financial

Establishing financial objectives depends on the life cycle of the organization. Kaplan and Norton (1996) classify life cycles of an organization into three stages: growth, sustain and harvest. In the growth stage, the objectives are usually revenue growth and sales growth. The objectives in the sustain stage are Return On Investment (ROI) and Economic Value Added (EVA), whereas in the harvest the objectives are maximizing cash flow and minimizing working capital.

The Faculty of Economics of Satya Wacana Christian University (FE SWCU)'s operation is in the sustain stage. There is no investment in fixed assets that needs long payback period. Investments aim to improve its quality (by adding new facilities), improve employees' capabilities (funding its employees/lecturers to study further), and to maximize production capacity (providing more classes).

The current financial objectives are sales growth, i.e. the revenue from the new students and profit margin. According to Kaplan and Norton (1996), the appropriate financial objectives are Return On Investment (ROI) and Economic

Value Added (EVA). In order to increase ROI, improving profit and reducing cost can be selected. These strategies accommodate the strategic vision of the company, i.e. attracting investment and total cost out. By improving profits the company can attract new investors. By reducing cost the company can gain higher profits.

The determination of the strategic objectives in the financial perspective of the FE SWCU, based on the strategy, vision, and mission, is to increase the return that is usually measured by financial ratios. The increasing income and cost effectiveness supports the achievement of a high return.

Table 2
Strategic Objectives and Strategic Measurement in Financial Perspective

Strategic Objectives	Strategic Measurement	
	Outcome Measure Lag Indicator	Performance Driver Lead Indicator
The increasing return	ROI	
The increasing revenue	Revenue growth	Percentage revenue from new customer

2. Customer

In the education / services industry, maintaining good relationships with customers (students and also the firm hiring its graduates) is essential for the organization's continuity. In an atmosphere where competition is firmly growing, numerous universities turn the focus externally, namely toward the customer-oriented services.

As a result, each university attempts to provide customers with excellent services. This strategy becomes a supporting factor to acquire a long-term and continuous financial performance.

To determine performance from the customer perspective, BSC applies the following group of measurements:

- Market segment: To describe the business proportion sold by the organization at a given market (in terms of the number of students)
- Customer acquisition: To measure in the relative form or absolute success of the organization to persuade or triumph in customer about new business.
- Customers' satisfaction: To assess the degree of customers' satisfaction.
- Customers' profitability: To measure the net profit obtained from the customer or certain segment after calculating all expenditure to meet the customers' needs.

In this perspective, the strategic objectives of FE SWCU are to increase the customers' trust and improve customers' satisfaction. A more comprehensive description of its measurement can be observed from the table below.

Table 3
Strategic Objectives and Strategic Measurement in Customer Perspectives

Strategic Objectives	Strategic Measurement	
	Outcome Measure Lag Indicator	Performance Driver Lead Indicator
Increasing customers' trust	Customer acquisition & retention	Percentage of new customer and percentage customer to non customer
Improving customers' satisfaction	Customer satisfaction	Customer satisfaction survey

3. Internal Business Process

To improve services to customers, the FE SWCU attempts to increase the quality of Internal business process. From this perspective the FE SWCU is able to determine the strategic objectives and its strategic measurement as follows:

Table 4
Strategic Objectives and Strategic Measurement in Internal Business Process Perspective

Strategic Objectives	Strategic Measurement	
	Outcome Measure Lag Indicator	Performance Driver Lead Indicator
Innovate new products	New product revenue	Product development cycle
Integrate customer service process	Average period of study	Ratio of lecturers and students

4. Learning And Growth

The purpose of learning and growth perspective is to provide the infrastructures that will enable the other three purpose perspectives to be attained. Regarding this, learning & growth perspective constitutes a supporting factor of the special performance of the three previous perspectives.

There are three classifications in the learning & growth perspective, namely:

- Employees' capability
- The capability of information system
- Motivation, empowerment, and harmonization.

Employees' capability can be measured by conducting surveys. These surveys are to measure employee's satisfaction, employee's retention, employee's training, and employee skills. The availability and responsive internal process information can measure the information capability of employees.

To improve performance in order to achieve its visions and missions, FE SWCU has made continuous efforts to organize schooling and training for the employees (lecturers) both in Indonesia and abroad, oriented towards

professionalism. However, the FE SWCU still faces difficulties to measure the degree of the employees' capability due to the lack of qualitative measurement standard of performance.

The evaluation of the performance measurement system of the FE SWCU shows that the management has only concentrated on the financial perspective. On the other hand, the non-financial measurement such as customers, business/internal process, learning and growth, which constitute major supporting factors in the financial achievement, were never carried out accurately.

In order to overcome this problem, the writer is attempting to implement the Balanced Scorecard approach to emend the performance measurement of FE SWCU. By applying this approach, the vision and mission of the company, as well as the strategies, should be explicitly affirmed. Thus, a comprehensive and coherent performance measurement can remedy the shortcomings.

The description of strategic objectives and strategic measurement that can be implemented at the FE SWCU can be seen in the table below.

Table 5
Strategic Objectives and Strategic Measurement in
Learning / Growth Perspective

Strategic Objectives	Strategic Measurement	
	Outcome Measure Lag Indicator	Performance Driver Lead Indicator
To improve employees' competence	Percentage of educated / trained employee	The number of educated / trained employee
To develop strategic information	The planned MIS has been implemented	The number of software being installed Ratio of computers and students
To increase personnel's motivation	Employee's satisfaction Revenue for employee	Employee's satisfaction survey

Performance Measurement of the FE SWCU

This section describes the performance measurement implemented at the FE SWCU that is seen from four perspectives, namely financial, consumer, business/internal process, and learning & growth.

Financial Perspective

For financial perspective, FE SWCU implements contribution margin, i.e. reflecting the spread between revenue and variable expenses as financial measurement. Daily activities are carried out and the profit made is to pay the fixed and variable costs.

Since FE SWCU is in a sustain stage and to implement the BSC, the appropriate outcome measures are ROI as well as the Cost of Quality and the Profit Growth. The other measures are profit growth and cost of quality. Cost of quality consists of four kinds of cost: appraisal cost, prevention cost, failure cost and correction cost. The last two of the costs (failure and correction cost) should be eliminated. Prevention cost may exist but it should eventually decrease from time to time.

Customer Perspective

For customer perspective, FE SWCU monitors the number of new students, number of transferred students, number of students taking leave, and number of applicants. The other indicators for customer perspective should be also monitored by the FE SWCU, i.e. the waiting time of the graduates to get job, quick response in answering the student's complaints and dropped out the students with bad performance.

In determining the degree of performance in the customer perspective, FE SWCU has not managed to devise indicators yet.

Table 6
Indicators of Customer Perspectives

Academic Year			
Indicators	1998-1999	1999-2000	2000-2001
Number of new students	790	838	880
Number of transferred students	28	15	21
Number of students taking leave	17	41	2
Number of students dropped out	0	0	0
Number of applicants	1327	1629	2241
Number of student's complaints	0	0	0

Sources: Primary data, 2001

From the data on the number of new students, it can be seen that the interest of students studying at FE SWCU has been increasing. However, the number of students transferring to the faculty in the 1999/2000 academic years decreased from 28 to 15 students. The data on the number of students taking leave is not a significant indicator regarding customer satisfaction because the reasons students take leave are unknown. Unfortunately, the FE SWCU has never dropped the students out. As a result, those students with unsatisfactory performance will not be motivated to finish their studies even though they have been in the faculty for years. In terms of the number of applicants, the data shows us that there is a significant increase from 1998/1999 to 2000/2001 academic year. According to the data above, there are no complaints from the students, this is probably because

the students do not know where to complain or to whom they should lodge their complaints.

To identify the customers' satisfaction, the writer distributes questionnaires for customers, i.e. the students of FE SWCU (sample/n = 30). By using the Likert scale (1-5), the assumption is that more or equal with 3 is satisfied. The finding of the customers' satisfaction is described below:

Table 7
Customers' satisfaction Survey

Description	Satisfied	Dissatisfied
The administration system		2.3
The library	3.4	
The computer's laboratory	3.8	
The English laboratory	3.7	
Contribution of the units under the economic faculty (education & management consultant, areas development, education & consultation of accounting, and small & micro of small enterprises)		2.4
Contribution of scholarships	3.9	
Contribution of the assistance of study	3.9	
Representative of the student's body	3.8	
Contribution of Economics and business journal of FE SWCU (DIAN EKONOMI)	3.1	
The climate of study	3.6	
Contribution of the services (dormitory, medical clinic, banks, post office, telecommunications services, book stores, photocopy center, cafes, sport services)	3.1	
Contribution of the China's study center	3.4	
Contribution of counseling services	3.7	
Contribution of student exchange programs	3.8	
Contribution of the alumni center	3.6	
Period of study	3.9	
Quality of the lecturers	3.2	
Quality of the buildings	3.7	
Whether or not the tuition fees has met the students' expectation in terms of facilities	3.7	
Pride of being FE SWCU's student	4.0	
Total	65.3	4.7
Average Number		3.5

Sources: Primary data, 2001

The average number is 3.5 (satisfied). In general, customers (students) of FE SWCU are satisfied, but in terms of administration systems and contribution of the units under the economic faculty (education & management consultant, areas development, education & consultation of accounting, and small & micro of small enterprises) they are dissatisfied.

Internal Business Process Perspective (IBP)

For IBP, FE SWCU has monitored the ratio between the lecturers and the students, average length of time of students' study, average GPA of graduates, highest GPA of graduates, and the lowest GPA of graduates. Actually FE should also monitor numbers of published journals/papers.

In an effort to enlarge internal business, FE SWCU has striven to improve the services and strain to innovate new products in order to meet the market segment. However, to measure the effectiveness of the internal business, FE SWCU has not determined yet the indicator of the performance.

Table 8
Indicators of Internal Business Process

Academic Year			
Indicators	1998-1999	1999-2000	2000-2001
Number of lecturers	63	79	83
Number of students	1342	1629	2241
Average period time of study	4.94 year	5.13 year	5.18 year
Average GPA of graduates	2.6854	2.68207	2.8471
Highest GPA of graduates	3.83	3.86	3.74
Lowest GPA of graduates	2.03	2	2.12

Sources: Primary data, 2001

From the data concerning lecturers and the students, it can be seen that the ratio between lecturers and the students in 1998/1999 was 1: 21.3 then decreased to 1: 20.6 in 1999/2000. However, in 2000/2001 the ratio increased significantly up to 1: 27. Actually, the ratio between lecturers and students should not more than 1: 25. Average time of study of the graduates increased from 4.94 / year to 5.13 / year and then increased again to 5.18 / year. It is difficult to determine whether the increase was appropriate since there might be reasons as to why the period of study has increased over the years. But whatever the reason, this is an unfavourable condition. A good university must decrease student's period of study but still maintain its quality. The average GPA of the graduates was volatile and could not be observed, because there were too many variables behind this. The Highest GPA as well as the lowest GPA of the graduate was unstable as it was influenced by the individuality of the student.

Learning and Growth Perspective

FE SWCU has monitored the number of lecturers taking post graduates programs, the number of lecturers who finished and returned, the number of new employees / lecturers, the number of resigned employees/lecturers and the number of training and schooling that are followed by the lecturers / employees.

In this perspective, FE SWCU has conducted all the indicators to implement BSC. However, FE SWCU still faces difficulties to measure the degree of employees' capability because of the lack of qualitative standard of performance measurement.

Table 9
Indicators of Learning & Growth Perspectives

Academic Year			
Indicators	1998-1999	1999-2000	2000-2001
Number of lecturers taking post graduate programs	2	4	5
Number of lecturers who completed study and returned	2	4	4
Number of new employees / lecturers	0	0	6
Number of resigned employees / lecturers	1	1	2

Sources: Primary data, 2001

The numbers of faculty members taking postgraduate studies were 11 and 10 of whom returned. The data on lecturers taking postgraduate do not show any significant indicator toward learning and growth perspective. Because of the increasing number of students from year to year, FE SWCU has therefore increased the number of lecturers as well. Although there are 4 (four) members of teaching staffs who resigned, if compared to the new staff employed, the number is smaller. Reasons for resignation are unknown. Thus, the data do not show significant indicators of employees' satisfaction.

From the questionnaires distributed to the employees (sample/n = 10), Employees satisfaction can be discovered by using the Likert scale (1-5), and the assumption that more or equal with 3 is considered satisfied. The employees' satisfaction is described below:

Table 10
Employees' satisfaction Survey

Description	Satisfied	Dissatisfied
The salaries	3.7	
The job position	3.8	
The job description	3.6	
Available assistance when facing difficulties	3.7	
Adequate help when facing difficulties	3.9	
Easy to file complaint	3.5	
Availability of facilities in line with the needs	3.9	
Frequent job positioning enhancement		2.5
Effectiveness of the meeting	3.3	
Effectiveness of the bureaucracy		2.7
Good climate of job condition	3.2	
Pride of being FE's employees	4.1	
The rewards	3.5	

Description	Satisfied	Dissatisfied
The punishments	3.1	
Total	43.3	5.2
Average Number	3.4	

Sources: Primary data, 2001

The average number is 3.4 (satisfied). In general, employees of FE SWCU are satisfied, but in terms of frequent job positioning enhancement and effectiveness of bureaucracy, they are dissatisfied.

Considered that the FE SWCU as a leading economics faculty in central Java (it can be seen by having an A Accreditation from National Accreditation Committee) and because the FE SWCU is in service industry, there are some indicators that must be measured and implemented in order to apply the Balanced Scorecard. Table 11 below will explain the indicators for measuring the performance of FE SWCU.

Table 11
Indicators of Four Perspectives in Balanced Scorecard for FE SWCU

Financial	Customer	IBP	Learning and Growth
<ul style="list-style-type: none"> ▪ ROI ▪ EVA 	<ul style="list-style-type: none"> ▪ Number of new students ▪ Number of transferred students ▪ Number of students taking leave ▪ Number of students dropped out ▪ Number of applicants ▪ Number of students' complaints 	<ul style="list-style-type: none"> ▪ Number of lecturers ▪ Number of students ▪ Average period time of study ▪ Average GPA of graduates ▪ Highest GPA of graduates ▪ Lowest GPA of graduates 	<ul style="list-style-type: none"> ▪ Number of lecturers taking post graduates programs ▪ Number of lecturers who complete study and returned ▪ Number of new employees/lecturers ▪ Number of resigned employees/lecturers

Conclusion

For financial perspective, FE SWCU implements contribution margin. To implement BSC, FE SWCU should have ROI or EVA on its measurement.

For customer perspective, FE SWCU only monitors the number of new students, number of transferred students, number of students taking leave, and number of applicants. To implement BSC, FE SWCU should also monitor the

waiting time of the graduates to get job, quick response in answering the student's complaints and drooped out the students with bad performance.

For internal business process perspective, FE SWCU has monitored the ratio between the lecturers and the students, average length of time of students' study, average GPA of graduates, highest GPA of graduates, lowest GPA of graduates. Actually FE SWCU should also monitor the numbers of published journals/papers.

For learning & growth perspective, FE SWCU has monitored the number of lecturers taking post graduates programs, the number of lecturers who finished and returned, the number of new employees / lecturers, the number of resigned employees/lecturers and the number of training and schooling that are followed by the lecturers / employees. In this perspective, FE SWCU has conducted all the indicators to implement BSC.

There are some supporting factors for FE SWCU to implement BSC, they are:

- Strong awareness from every leader to have qualified performance measurements
- To enter the globalisation it is needed BSC as a coherent and comprehensive strategic management systems
- Having sufficient sources both financial and non financial to implement BSC

On the other hand, there are some impeding factors to implement BSC, they are:

- FE SWCU is still under the university; it means that every big decision must be consulted with the university first.
- There are some persons within the faculty who assume BSC as "old wine in the new bottle".
- There is no guarantee that by implementing BSC, FE SWCU will come one step forward.

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